$\qquad$
$\qquad$

1. Which set of data best represents the data on the scatterplot?

Memory Loss
A.

| Time | 10 | 30 | 60 | 80 | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Memory | 95 | 60 | 40 | 30 | 20 |

B.

| Time | 10 | 30 | 60 | 80 | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Memory | 20 | 30 | 40 | 60 | 95 |

C.

| Time | 10 | 30 | 60 | 80 | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Memory | 100 | 80 | 60 | 40 | 20 |

D.

| Time | 10 | 30 | 60 | 80 | 100 |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Memory | 85 | 60 | 50 | 40 | 20 |

2. There is no correlation between a person's hair length and shoe size. Which scatter plot best represents this situation?

Hair Length (in.)

Hair Length (in.)
C.


3. Which equation most closely models the data in the scatter plot?
A. $y=x$
B. $y=-x$
C. $y=2 x$
D. $y=-2 x$

4. Which equation represents the line of best fit for this scatterplot?
A. $y=-x-5$
B. $y=x-5$
C. $y=-x-2$
D. $y=x-2$

5. The following table represents the number of goals scored in the Men's World Cup from 1962 through 1998. Which of the following scatterplots represents this data?

| Year | 1962 | 1966 | 1970 | 1974 | 1978 | 1982 | 1986 | 1990 | 1994 | 1998 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Goals | 90 | 90 | 95 | 97 | 103 | 145 | 135 | 115 | 140 | 170 |

A.

B.

C.


7. The cost (in cents) of a first-class US Stamp from 1917 through 2007 is shown in the scatterplot. What is most likely the cost of a $1^{\text {st }}$-class stamp in 2015 based upon the curve of best fit?
A. 42
B. 45
C. 47
D. 53

8. Tyler compared his test scores in Algebra 2 with the number of hours of tv he watched on the night before each test. If Tyler watches tv for 2.5 hours, what is the most likely test score based upon the curve of best fit?

9. Which set of data best fits this scatterplot?
A.

| $x$ | 0 | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $y$ | 100 | 59 | 12 | 28 | 31 |

B.

| $x$ | 0 | 1 | 2 | 3 | 4 |
| :--- | :--- | :--- | :--- | :--- | :--- |
| $y$ | 50 | 38 | 17 | 10 | 25 |
| X | 100 | 59 | 23 | 18 | 10 |
| $y$ | 0 | 1 | 2 | 3 | 4 |
| $x$ | 0 | 1 | 2 | 3 | 4 |
| $y$ | 100 | 59 | 23 | 18 | 10 |


10. Determine what type of correlation this scatterplot has.
A. Weak, negative
B. Strong, negative
C. Weak, positive
D. Strong, positive
E. No correlation

11. Determine what type of correlation this scatterplot has.
A. Weak, negative
B. Strong, negative
C. Weak, positive
D. Strong, positive
E. No correlation




Growth vs. Time

| Time | Growth |
| :---: | :---: |
| 2 | 1 |
| 4 | 2 |
| 5 | 3.5 |
| 6 | 6 |
| 6.5 | 8.5 |




Raymundo wanted to know if sons of taller fathers tend to be taller. He gathered a representative sample of fathers and sons and measured their heights. This graph shows the relationship between the heights of fathers and sons (in inches) for Raymundo's sample.

The graph shown below shows the relationship between population density and pollution per person for 36 Japanese cities.

Carbon dioxide emissions per person



Scatterplot of outdoor temperature in relation to cricket chirps.

| Temperature Data and Cricket Chirps <br> (Excerpt) |  |
| :--- | :--- |
| Temperature (Fahrenheit) | Number of Chirps (in 15 <br> Seconds) |
| 57 | 18 |
| 60 | 20 |
| 64 | 21 |
| 65 | 23 |
| 68 | 27 |
| 71 | 30 |
| 74 | 34 |
| 77 | 39 |


| Name | Height (cm) | Weight (kg) |
| :--- | ---: | ---: |
| Fred | 190 | 82 |
| LLucy | 168 | 61 |
| Jill | 175 | 68 |
| Li | 188 | 91 |
| Harry | 175 | 85 |
| Gertrude | 151 | 59 |
| Peggy | 160 | 65 |

Direction




